# ECONOMICS

# THE REMARKABLE STORY OF HOW THE ECONOMY WORKS

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Published by: Run Rabbit Books www.runrabbitbooks.com

ISBN-10: 0988669102 ISBN-13: 978-0988669109

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## PART 1

# THE MAIN STORY

## CHAPTER 1

# What is an Economy?

Economics is the study of the economy. So we first need to figure out what an economy is. The global economy teeming with seven billion people is too big to wrap our minds around. So we'll start with a smaller one.

A middle-aged accountant named Max goes on a vacation cruise, has one too many free drinks, falls overboard, grabs a passing log, drifts for days, and washes up on the sandy beaches of a pleasant-looking island. He lies there for a while, hoping the kindly native islanders will carry him to their hut and feed him coconuts and spring water. When no one shows up all afternoon, he realizes he's alone. He sits up and takes stock of his situation.

Max wants some things. He wants food, clothes, shelter, entertainment, good health, companionship, and to not be eaten by a tiger. How can he get these things?

He has some resources at his disposal. The island has coconut trees, farmable land, forests, wild turkeys, and streams filled with trout. We call these resources *capital*. Max also has the ability to work. He can perform physical tasks like lifting a rock and climbing a tree. He can perform mental tasks like figuring out which coconut tree has more coconuts. This ability to work—to perform physical tasks with his body and mental tasks with his brain—we call *labor*.

Max needs to use what he has (coconut trees, streams, wild turkeys, a strong back, and a sharp mind) to get what he wants (log cabin, shirts, coconuts, and spring water). He clears land and plants pineapples, climbs coconut trees to collect coconuts, weaves a shirt out of tall grass, and cuts down trees to build a cabin. He befriends a dog for company, and dances around a bonfire for entertainment.

These activities constitute Max's economy. Max *produces* what he wants using the labor and capital available to him, and he *consumes* it to satisfy his wants. This daily rhythm of producing and consuming constitutes his economy. The economy, broadly defined, is his daily life.

Now, instead of just Max on a small island, let us put seven billion people together on a much bigger island called Earth, and we have the global economy. The scale is bigger, but many of the problems are the same. Like Max, these seven billion people want food, clothes, shelter, companionship, and entertainment. Like Max, they have to figure out a way to get these things using the limited resources that they have on their planet. They harness their land, minerals, forests, and sunlight to produce cornflakes, aspirin, TV shows, and townhouses, which they then consume. Whether as cooks or carpenters, bankers or yoga instructors, shoppers or moviegoers, students or retirees, this describes what everyone does all day. Every morning, seven billion people wake up and play their part in an incredibly vast and intricate ballet of production and consumption that constitutes the global economy, and life itself.

# CHAPTER 2 A Good Economy

An economy works well if it makes good use of its limited resources to satisfy people's desires as best as possible. It works badly if it wastes resources, builds the wrong things using the wrong techniques, and gets them to the wrong people.

Max has limited time and resources on his hands. If he spends all day building a massive log cabin, he will go hungry. If he spends all day collecting coconuts, he will be cold at night. If he spends all day collecting coconuts and building his cabin, he can't dance around a bonfire. Sure, he would like more of everything—a supersize cabin, plenty of coconuts, and bonfire dancing day and night. But he can't have that. He has to make do with the limited time and resources that he has available to him, and he has to use them wisely to make sure that what he's doing lines up with what he really wants.

Like Max on his island, we need to make sure that we, here on Planet Earth, are doing the right things with our limited resources. In 2010, the world used its limited resources to produce 58,478,810 cars and 1,011 airliners. Was this the right thing to do? Should we instead have produced fewer cars and more airliners? Maybe you got a job closer to where you live, so you can now walk to work. So the world does not need as many cars. And your daughter just moved clear across the country and you plan to fly there often to see her. So the world needs more airliners. Did you send a note describing the changes in your life to whoever's in charge of building cars and airliners? If you didn't, how would they know to build fewer cars and more airliners to accommodate you? How can they figure out how many cars and airliners to build if nobody is sending them this information? Max has it easy. He is the only one on the island, and it is easy for him to know what he wants and what he can do. But for us here on Planet Earth with seven billion people, each with our own complicated life, we could get this terribly wrong.

And terribly wrong we get it. The world economy as a whole is a badly-run operation. Let me grade economies on a scale of zero to ten. A grade of zero means total dysfunction: everyone in the economy is starving because all they do is dig holes and fill them back up. A grade of ten means perfection: everything is done exactly right. The worst-run parts of the global economy are places like Somalia where famines still kill people. I give Somalia a two. India works a little better and gets a three. China gets a four. France gets a five. And the best-run major economy in the world, the United States, gets only a six. In other words, the bestrun economies in the world are somewhat dysfunctional, and the worst-run economies are very dysfunctional.

If you live in the United States, improving the economy from a somewhat dysfunctional six to a wellfunctioning nine would greatly improve your life. It would be like living in a supereconomy, the likes of which the world has never seen. You would find it easier to get jobs, be able to work fewer hours, live a longer and healthier life, not die waiting for a kidney transplant, find cheaper and better housing more easily, live closer to work, zip along highways without being stuck in traffic, go on more vacations, have more money socked away for retirement, and send your kids to better schools. Cancer might have been cured.

If all this sounds fanciful, imagine you've lived your whole life in Zimbabwe, where people live on \$3 a day and usually die before their fiftieth birthday. Somebody tells you about this wonderful place-this land of plenty-where ordinary people live in twothousand-square-foot mansions, own two cars, eat all the cake they want, fly in airplanes, and live to eighty! If TV didn't bring you a glimpse of life in the Western world, you wouldn't believe it. That's the stark difference between a seriously dysfunctional two and a dysfunctional six. Advancing somewhat from а somewhat dysfunctional six to a well-functioning nine would not be a whole lot less spectacular. We just don't understand what we're missing because there is no

well-functioning economy to serve as an example. We must imagine it.

How can we get our economies to work better? There are two things we need. First, the *rule of law*. Nobody is going to plant cabbages if roving bands of thugs or corrupt policemen are going to take their cabbages away at harvest time. Second, we need *good laws*. Nobody is going to plant cabbages if the law requires them to dump their harvest in the swamp or give it all to the taxman.

Countries in Africa, Asia, Eastern Europe, Latin America, and the Middle East struggle with the rule of law. Weak and corrupt government is the norm in these places. I grew up in India and experienced it firsthand. A water department official once shut off our water supply because we didn't know we were supposed to "tip" him when he came by to ostensibly check if everything was okay. People foolish enough to go to court to settle a dispute face decades of an interminable judicial process that involves both parties bribing the judge. Truck drivers cannot go far without being shaken down by the police. Corruption is so ingrained that when a famously incorrupt senior police official was newly posted to our town, our neighbor worried about how she could get anything done without bribes. This neighbor was no gangster. She was a schoolteacher. She just couldn't imagine a public official doing anything-legal or illegal-without a bribe.

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Only a thin slice of the world has escaped such lawlessness. These are the fortunate few living in Western Europe, the United States, Canada, Australia, New Zealand, and Japan. Sure, there is corruption in these places too. But it is not nearly as routine, pervasive, intrusive, and stifling as in the rest of the world. The government, however imperfect, discharges its basic duty of maintaining law and order reasonably well. People can plant cabbages without worrying about gangsters showing up. They can water their cabbages without city officials shutting off their water supply to extract bribes. They can truck their cabbages across town without being shaken down by the police. This is a big part of why these economies work better than others.

How can we strengthen the rule of law in lawless lands? I'm afraid I don't have the answer to that. My expertise as an economist lies in the second half of the equation: if we have a society that is more or less governed by laws, what kind of laws should we have? Here, the whole world comes up short. The West does have better laws than most of the rest of the world. But even the best have lots of bad laws that clog their economies and prevent them from working nearly as well as they could.

Unlike a corrupt political infrastructure—which most people recognize as a bad thing but are powerless against—bad laws exist mostly because people think they are good laws. And they think that way because they don't know enough economics to understand the consequences of those laws. Special interest groups everyone from farmers and physicians to car manufacturers and internet retailers—take advantage of this ignorance and push through laws that further their own interests at the expense of everyone else.

The laws you see today are a direct consequence of economic illiteracy in the general population. If every voter learned economics tonight, the laws would change tomorrow. If that happened, you would start experiencing some of the benefits within a few months. Other benefits would take longer to surface as the economy slowly adjusted to the new rules. But within five years, your life would be a lot better. Within fifteen years, the economy would have pretty much fully responded to the new laws. You would then be living in a supereconomy.

# CHAPTER 3 Efficient Is Good

An economy contains many people with competing desires. This naturally implies much disagreement about what needs to be done. Sammy wants a bigger house and Jimmy wants more pancakes. Since the economy's resources are limited, if Sammy gets a bigger house, Jimmy can't have more pancakes. Who should the economy satisfy: Sammy or Jimmy? This is the question of *distribution*. How should the output of the economy—the fruits of its labor and capital—be divided up between people?

Right now, we divide it up pretty unevenly. A banker in Manhattan might get thousands of times what a construction worker in Nairobi gets. Maybe you think that's okay, maybe you don't. For those of you who are interested in this issue, I will discuss later what we can do to make things more equitable. But for now, let's put aside the difficult issue of distribution and focus instead on something just as important but refreshingly straightforward and uncontroversial.

Let's go back to Max. There are no distributional issues in Max's economy because Max is the only one around. All of the island's output should clearly go to him. Max's economy needs only to make sure that the limited resources on the island are used judiciously to best satisfy Max's desires. For example, Max shouldn't build an oversize cabin while going hungry. That's a bad use of his time because he would rather have a full stomach than an oversize cabin. If, in spite of this, he foolishly builds an oversize cabin while going hungry, we say that Max's economy is being *inefficient*. Inefficient simply means that the situation can be unambiguously improved upon. Something is wrong, and fixing it will improve someone's life without hurting anyone else. So inefficient means that a mistake was made. A well-run economy cannot be inefficient because it cannot make mistakes.

Let's look at another example, this one involving two people. There's an almond and a cashew. Jane prefers the almond and Jillian prefers the cashew. But Jillian eats the almond and Jane eats the cashew. A clear mistake, right? The economy messed up. If, instead, Jillian had eaten the cashew and Jane had eaten the almond, both of them would have been better off. This is not a matter of distribution—about who should have more and who should have less. This is not a matter of making one person better off at the expense of another. Something was broken, and fixing it would have helped both parties without hurting anyone else.

When I say that the economy is not working well, I mean that it contains inefficiencies like these-

opportunities for improvement. The real errors of the real economy may not be quite as obvious as in the simplified scenarios I just made up. The world is a big and complicated place, and mistakes hide in the complexity. But a trained eye can find them. They are everywhere, and they are every bit as absurd as my made-up examples. I'll show you three of these errors. They are not necessarily the most egregious errors just three examples to illustrate the problem.

#### THE APARTMENT SWAP

You have lived in the same apartment in Upper Manhattan for many years. Because of rent control laws that limit how much your rent can rise each year, you are now paying only \$1,000 per month. If you move out, your landlord can rent it out to someone else for twice as much. I am in the same situation, except my apartment is in Lower Manhattan. I too am paying only \$1,000 per month for an apartment that will fetch twice as much in the open market. Because of job changes, I would like to move into your apartment in Upper Manhattan and you would like to move into my apartment in Lower Manhattan. But if we switch apartments, both of us would have to pay more in rent. So we decide to stay put and face a tedious commute, every day, in opposite directions.

The economy malfunctioned. It placed us in the wrong apartments. If we had switched apartments,

both of us would have been better off and no one else worse off. But the rules of the game prevented that from happening. Our economy didn't have a system in place to put us in the right apartments. It was inefficient.

#### The Fast Lane

Your mother-in-law calls from the hospital to say that your wife is going to deliver the baby sooner than expected. Eager to be present at the birth of your child, you drop everything, rush to your car, and get on the freeway. Soon, you hit traffic. It's stop and go as far as you can see. You're not going to make it. You seethe, swear, and lean on your horn.

You look out your window and see my wife and me breezing by on our way to the mall. We are on the High Occupancy Vehicle (HOV) lane—the fast lane where only vehicles carrying two or more people are allowed. We're in no particular hurry, but we get to go on the fast lane because there are two of us in the car. You're in a big hurry, but you're not allowed on because there is only one of you in the car. Those are the rules.

The rules created an inefficiency. You would have been willing to pay hundreds of dollars for the privilege of driving on the fast lane to get to the hospital on time. We, on the other hand, value getting to the mall quickly at only a couple of dollars. If the economy took \$10 from you and put you in the fast lane, and gave that money to my wife and me and put us in the regular lane, all three of us would have been better off and no one else worse off. But the economy didn't do it. It malfunctioned. It did not have a system in place to ensure that you were on the fast lane instead of us. It was inefficient.

#### (IN) FLEXIBLE SPENDING ACCOUNTS

The United States has a program called the Flexible Spending Account (the "flex account"). Money you put into this account is not taxed, but you can use it only for medical and childcare expenses. The tax savings are attractive, so a lot of people sign up. The catch is that you have to decide before the start of the year how much money you will put into the account for that year. If you put in too much and don't use it all up before the end of the year, you lose the unused money-ouch! If you put in too little and run out before the end of the year, you can't use tax-free money for the rest of your medical and childcare expenses that year-also ouch! So you have to guess your future expenses as best as you can, fill up your account accordingly, and hope you didn't put in too much or too little.

The problem with this arrangement is that people who have money left over in their flex accounts toward the end of the year will start spending that money on things they don't need just to use up their flex money. They'll stockpile cough syrup on the slim chance that they'll need it before it expires. Meanwhile, people who have a cough, but no flex money left, might forgo the cough syrup.

This creates inefficiencies. Say a bottle of cough syrup costs \$5. Lara has a cough, but no flex money left. So she'll have to pay for the cough syrup out of her pocket. She values the cough syrup at only \$3, so she doesn't buy it. Boris isn't sick, but has a lot of flex money left. Though he values the cough syrup at just \$0.10, he still buys a bottle to use up his flex money.

This was inefficient. If the economy took the cough syrup from Boris and gave it to Lara, and took \$2 from Lara and gave it to Boris, both Lara and Boris would have been better off and no one else worse off. The situation could have been unambiguously improved. The economy messed up. It didn't get the cough syrup to the right person. It was inefficient.

I could go on, but I'll stop here. These examples should be enough to give you a sense of what inefficiencies are and how prevalent they are. They tell us that our economy is not working properly, and that we could be doing better.